

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
7 April 2005 (07.04.2005)

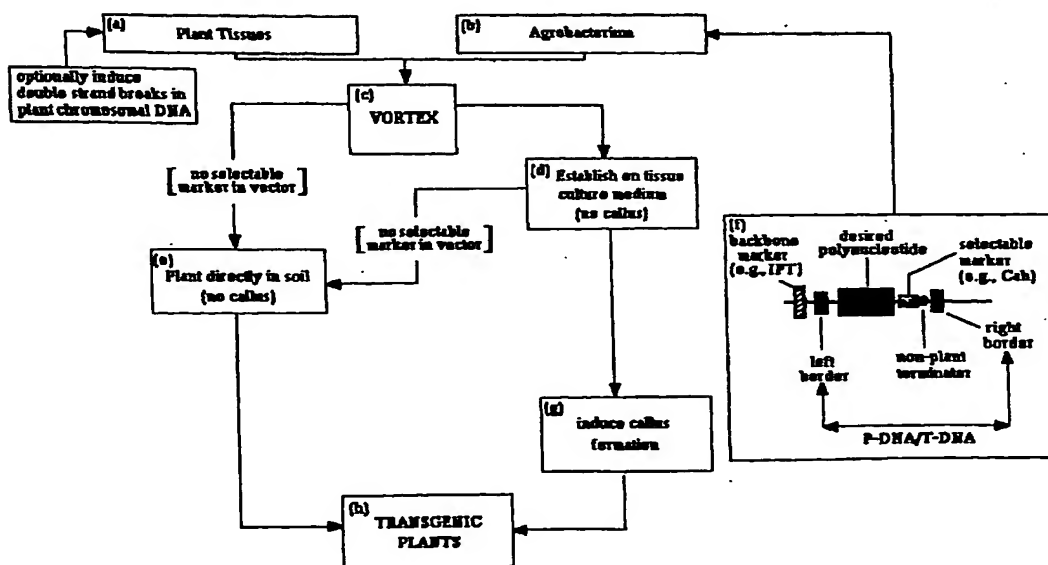
PCT

(10) International Publication Number  
**WO 2005/029944 A2**

- (51) International Patent Classification<sup>7</sup>: **A01H**
- (21) International Application Number: **PCT/US2004/030975**
- (22) International Filing Date:  
22 September 2004 (22.09.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
10/667,145 22 September 2003 (22.09.2003) US
- (71) Applicant (for all designated States except US): **J.R. SIMPLOT COMPANY** [US/US]; One Capital Center, 999 Main Street, Suite 1300, P.O. Box 27, Boise, ID 83702 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **WEEKS, J., Troy** [US/US]; 6150 S. Shagbark Avenue, Boise, ID 83716 (US).
- (74) Agent: **PEET?, Richard C.?**; **FOLEY & LARDNER LLP**, 3000 K Street, Suite 500, Washington, DC 20007-5143 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,

[Continued on next page]

(54) Title: **REFINED PLANT TRANSFORMATION**



(57) Abstract: The present invention provides methods for producing transgenic plants based on an optimized transfer of DNA from Agrobacterium to plant cells, and/or on an optimized integration of the transferred DNAs into plant cell genomes. It also provides Agrobacterium-transformation vectors that can be used to limit or eliminate the transfer of undesirable DNA. The present invention can be applied to essentially any species of plants, including many recalcitrant plant species. The present invention also provides new cyanamide resistance marker genes and proteins for enhancing plant cell transformation.

BEST AVAILABLE COPY

WO 2005/029944 A2



SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

— *without international search report and to be republished upon receipt of that report*